## **CONTENTS**

Papers	Page
VOLUME CHANGES IN SANDS DURING CYCLIC LOADING by Marshall L. Silver and H. Bolton Seed	1171
BREAKOUT RESISTANCE OF OBJECTS EMBEDDED IN OCEAN BOTTOM by Aleksandar S. Vesić	1183
ENGINEERING PROPERTIES OF MINE TAILINGS by Howard C. Pettibone and C. Dan Kealy	
LATERAL AND ROCKING VIBRATION OF FOOTINGS by Anestis S. Veletsos and Yau T. Wei	1227
SIMPLIFIED PROCEDURE FOR EVALUATING SOIL LIQUE-FACTION POTENTIAL by H. Bolton Seed and Izzat M. Idriss	1249
EFFECT OF MICA ON $K_O$ COMPRESSIBILITY OF TWO SOILS by Charles A. Moore	1275
TORSIONAL VIBRATIONS OF CIRCULAR FOUNDATIONS by Gerd F. Weissmann	1293
SLURRY WALLS FOR BART CIVIC CENTER SUBWAY STATION	
by J. George Thon and Richard C. Harlan	1317
(over)	

This Journal is published monthly by the American Society of Civil Engineers. Publications office is at 345 East 47th Street, New York, N.Y. 10017. Address all ASCE correspondence to the Editorial and General Offices at 345 East 47th Street, New York, N.Y. 10017. Allow six weeks for change of address to become effective. Subscription price is \$16.00 per year with discounts to members and libraries. Second-class postage paid at New York, N.Y. and at additional mailing offices. SM.

## DISCUSSION

## Proc. Paper 8347

TIME DEPENDENT DEFORMATION OF NORMALLY CON- SOLIDATED CLAYS AND PEATS, by Laing Barden (Jan., 1969. Prior Discussions: Jan., 1970). closure	1337
BEARING CAPACITY OF FOUNDATIONS ON SAND, by Assad Abdul-Baki and Lewis A. Beik (Mar., 1970. Prior Discussions: Nov., 1970, Jan., 1971).  closure	1339
COMPARISON OF PLANE STRAIN AND TRIAXIAL TESTS ON SAND, by Kenneth L. Lee (May, 1970. Prior Discussions: Nov., 1970, Feb., 1971). closure	1340
THEORY OF BRITTLE FRACTURE APPLIED TO SOIL CEMENT, by Kalankamary P. George (May, 1970. Prior Discussion: Feb., 1971). closure	1341
DECISION THEORY APPLIED TO SETTLEMENT PREDICTIONS, by Joseph I. Folayan, Kaare Hoëg, and Jack R. Benjamin (July, 1970. Prior Discussions: Jan., Feb., 1971).	
PERFORMANCE OF FOUR FOUNDATIONS ON END BEARING PILES, <sup>a</sup> by David J. D'Appolonia and T. William Lambe (Jan., 1971. Prior Discussion: July, 1971).	1342
DYNAMIC MODULI AND DAMPING RATIOS FOR SOFT CLAY, by William D. Kovacs, H. Bolton Seed, and Clarence K. Chan (Jan., 1971). by Kolinjuvadi S. Sankaran and Madurachari S.	1343 1345
CAISSON CONSTRUCTION PROBLEMS AND CORRECTION IN CHICAGO, <sup>2</sup> by Clyde N. Baker, Jr. and Fazlur Khan (Feb., 1971. Prior Discussion: Aug., 1971). by Robert F. Legget	1945

a Discussion period closed for this paper. Any other discussion received during this discussion period will be published in subsequent Journals.

	Page
AGING EFFECTS ON SWELL POTENTIAL OF COMPACTED CLAYS, by Gabriel Kassiff and Raphael Baker (Mar., 1971). by Robert C. Davis	1348 1349
LOAD-DEFORMATION MECHANISM FOR BORED PILES, <sup>a</sup> by Richard D. Ellison, Elio D'Appolonia, and Gerald R. Theirs (Apr., 1971).	
by Michael W. O'Neill	1350
TECHNICAL NOTE	
Proc. Paper 8391	
<del></del>	
SEEPAGE THROUGH TRIANGULAR DAM WITHOUT TAILWATER by Michael A. Collins	1355

<sup>&</sup>lt;sup>a</sup> Discussion period closed for this paper. Any other discussion received during this discussion period will be published in subsequent Journals.